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White Paper

Advancing Clinical Judgment in the Nursing Classroom

ADVANCING CLINICAL JUDGMENT IN THE NURSING CLASSROOM

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Background

National Council of State Boards of Nursing (NCSBN®), under the leadership of Dr. Phil Dickison, has taken on the monumental task of changing the NCLEX® — the premier testing exam in nursing. The changes have been based on extensive research, including the Muntean (2012) literature review examining 200 articles about nursing clinical decision-making abilities and the amount of errors made by novices in nursing care (Saintsung, Gibson, and Pennington, 2011). There is evidence that up to 65 percent of errors could have been prevented if new nurses had made better decisions (Brennan, et al., 2004). Johns Hopkins research indicates that more than 250,000 people die each year due to medical error. This is now the third leading cause of death in the U.S. (2016 Johns Hopkins study).

> The goal of the Next Generation NCLEX exam is NOT to make the test harder and harder, but to make nursing care safer with better patient outcomes!

Fast forward to today — NCSBN is changing the NCLEX exam to meet the demands of modern nursing care. The focus is on saving more patient lives and positively impacting patient outcomes. A nurse's clinical judgment has been determined to be a primary factor of successful patient outcomes. Clinical judgment is defined as the observed outcome of two mental processes — critical thinking and decision making (NCSBN, 2019). Nursing students need to know, and have the expectation, that they will make important decisions affecting patient outcomes. They need to be able to practice the high-level cognitive process of clinical judgment prior to entering practice.

What do we know?

NCSBN is currently hard at work looking at the research data. They are on Step Five (Research Measurement) of their eight-step plan for the Next Generation NCLEX (NGN). Three more steps are left for completion — Build Technology, Perform Alpha-Beta Tests, and Launch New NCLEX. The anticipated rollout for the NGN is 2023 (FAQ, NCSBN Next Gen NCLEX, 2019). Prior completed steps of the NCSBN plan included: Test Prototypes, Ensure Usability, and Collect Item Data. The prototypes NCSBN has identified to proceed with in the pilot, based on data collected from the research section of the NCLEX-RN exam, are as follows: extended drag-and-drop items, CLOZE items, enhanced hot-spot items, extended multiple-response items, and matrix items. Below is the diagram they have presented to the public of all the tested item types.

THE CLINICAL JUDGMENT MODEL AND DOMAIN DISTRIBUTION

	Cue Recognition	Hypothesis Generation	Communication	Consequences and Risk	Task Complexity
Enhanced Hot Spot					
Enhanced Multiple Response					
Extended Drag and Drop					
SBAR					
Cloze Items					
Constructed Response					
Rich Media Scenarios					
Dynamic Exhibits					

KEY

measures clinical judgment in that category | evaluates some portion of clinical judgment | doesn't measure clinical judgment

What is the NCSBN Clinical Judgment Model (CJM)?

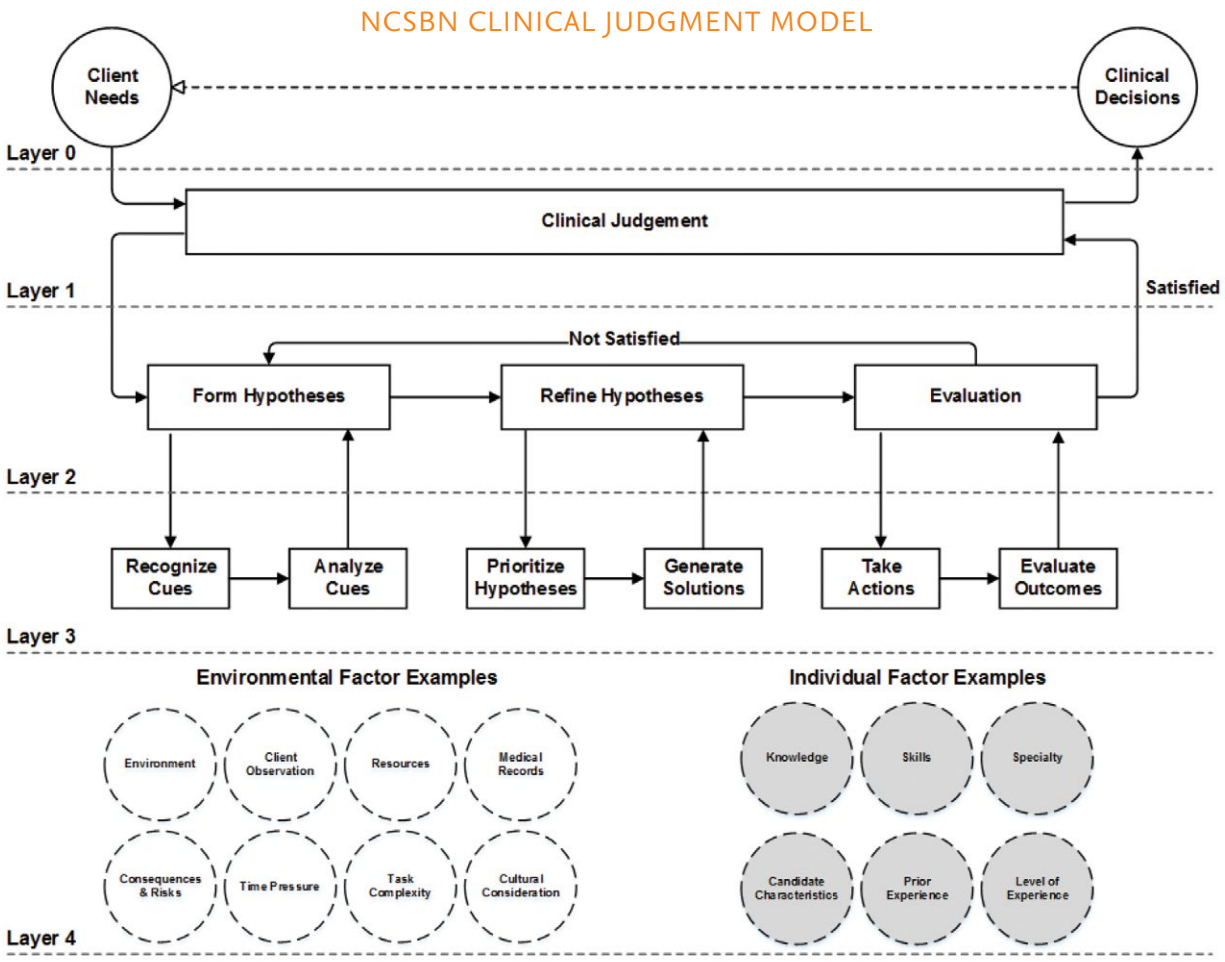
In short, it is a composite illustration considering both nursing critical thinking and clinical decision-making to facilitate client needs through clinical decisions.

The CJM delineates the process through which a clinical judgment is made. Each layer of the CJM further defines the previous layer to identify the cognitive processes that occur in clinical judgment. (Layer 2 further defines Layer 1, Layer 3 further defines Layer 2, etc.). Layer 3 is the refined process of Recognizing Cues, Analyzing Cues, Prioritizing Hypotheses, and Generating Solutions. This is expanded upon by the nurse Taking Actions and Evaluating Outcomes.

Educators should familiarize themselves with the CJM and each of the steps:

- **Cues** – Identifying relevant and important information from different sources (e.g., medical history, vital signs).
- **Analyze Cues** – Organizing and linking the recognized cues to the client's clinical presentation.
- **Prioritize Hypotheses** – Evaluating and ranking hypotheses according to priority (urgency, likelihood, risk, difficulty, time, etc.).
- **Generate Solutions** – Identifying expected outcomes and using hypotheses to define a set of interventions for the expected outcomes.
- **Take Action** – Implementing the solution(s) that addresses the highest priorities.
- **Evaluate Outcomes** – Comparing observed outcomes against expected outcomes.

Many external and internal factors are a part of the decision-making process, which are included in Layer 4. "These expected behaviors determine if the nurse is able to make an appropriate clinical decision" (https://www.ncsbn.org/NGN_Spring19_Eng_04_Final.pdf). According to Dr. Phil Dickison (Dickison, 2019), this tool is intended to be used to measure whether clinical judgment is occurring, not take the place of teaching clinical judgment or clinical reasoning.



In March 2019, the NCSBN introduced the Action Model as a way for educators to view the Clinical Judgment Model. It was designed to help nurse educators "close the gap between what is measured on the exam and what is taught in clinical nursing education" (https://www.ncsbn.org/NGN_Spring19_Eng_04_Final.pdf).

Seven Ways to Bring Clinical Judgment into the Nursing Education Classroom

1. Create a dynamic active learning environment. Require students to complete pre-assignments of contextual knowledge for the topic of the day. Class time can then revolve around patient case studies, simulations, or group activity space. Students can ask each other the "why" questions — Why would you do that? What information is relevant/irrelevant? What is of immediate concern? Spend your class time with high-level thinking projects instead of knowledge dispersion/lecture.

2. If you have been teaching in a traditional lecture format, consider changing your classroom to a model of 20 minutes of content distribution, 20 minutes of patient case study/simulation/group activity, and 10-minute review format (see #7 below for more ideas). Each hour, a different patient may be introduced to your class.

3. Bring NCLEX exam-style questions to your classroom. Have students get into groups to discuss the questions and decide on an answer. The students can present a question with the group and share how they came up with the correct answer. This is a great way to solidify knowledge and develop the application and analytical reasoning needed for clinical judgment.

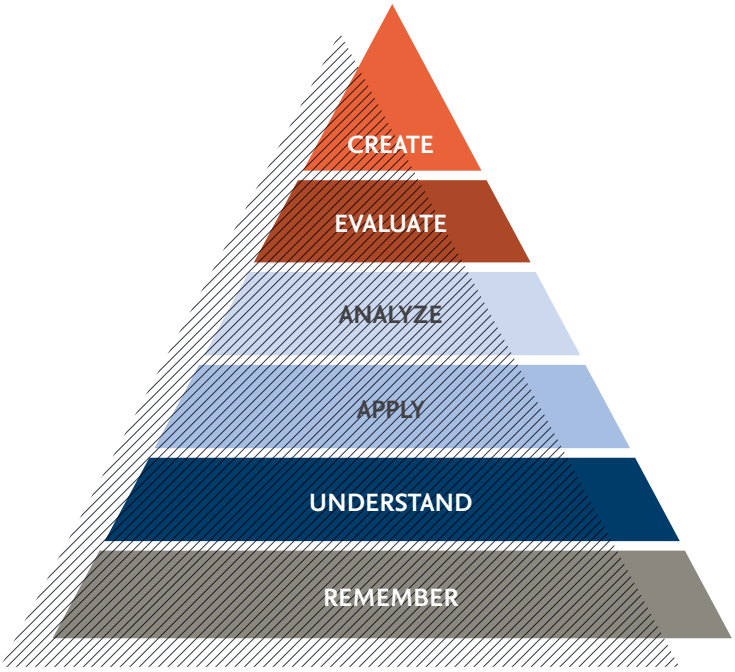
4. Present case studies/simulations in the classroom. Students learn best through active learning and have greater information recall if they have done the work to determine the answers. While students are working through a simulation scenario, stop the action and ask about the cues and hypotheses. If you are working in an area where students can see you, hold up a sign that says "Cues" to trigger students to stop what they are doing and discuss the cues they are seeing.

5. Take each opportunity to have students complete a "CREATE" on Bloom's Taxonomy. This can be done through SBAR notes (Situation, Background, Assessment, Recommendation) within SimChart®. However, this can easily be changed to SCAR (Situation, Cue Identification, Analysis of Cues, Recommendation of Solutions) to reflect the Clinical Judgment Model. Have the students fill out this form as a nurse-to-nurse or nurse-to-healthcare provider report after every simulation scenario or after a clinical day.

   Other ways of incorporating clinical judgment include having students: answer open-ended questions about a topic; determine nursing care after learning about a disease process; and determine signs and symptoms of a disease process. Analyzing data and making a plan to improve patient outcomes falls under "CREATE" as well. Encourage students to focus on anticipating what will happen next in a scenario and adjust their interventions accordingly.

Continued...

BLOOM'S TAXONOMY



6. Have students bring a drug handbook to class and ask them to identify/highlight three important concerns regarding a selected medication related to the topic for the day. Then have them document why they chose these three concerns and which client needs concern them the most. Ask students to identify any concerns they might have for a patient taking this drug with a specific history and physical and progress notes. For example, a patient might be ordered Morphine Sulfate for pain. But, the history and physical might show that the patient's respiratory rate is decreased. What would the nurse do?

7. Plan knowledge retrieval activities as a part of your class. For example, at the end of a class, ask students to write down:

    a. Three things they don't want to forget from today's class.
    b. Five years from now, what five things from today do they want to remember?
    c. Provide a low-stakes quiz of the important materials of the day.
    d. Have students write a one-minute paper.

Using Simulation to Add Clinical Judgment Theory to Your Curriculum

In addition to the seven ideas above, it's also important to start looking at simulation through the eyes of clinical judgment. **Below are some suggested activities.**

Idea #1

Present a SimChart case study to the class. Students learn best through active learning and have greater information recall if they have done the work to determine the answers. Give students the patient's History and Physical, Doctors Orders, and Plan of Care and allow them five to 10 minutes to review the documents (time pressures). Have students **identify the cues** in the documents. What information is relevant/irrelevant? What is of concern? Have students discuss in groups or write down the cues that they see as relevant and what they are concerned about in the documents presented.

The next step is **analyzing the cues**. This step requires higher-level cognitive processing. The student must apply their knowledge about the disease process(es) occurring and determine what is a normal behavior/symptom and what is an abnormal symptom.

Then, provide the labs and vital signs. Present a time concern and/or a distraction to them while the case study is being presented. The student will have to identify the **priority hypotheses** based on the information provided from the cue identification and analyzing of the cues. Students will then have to determine what to do about the situation — **generating solutions** to the issues in the case study. They can discuss this with their peers and come up with the best solutions to the problems the patient is experiencing. Propose alternative solutions to the medical concern. What do you see as normal outcomes/adverse outcomes? What would you be concerned about? What if "x" happens, then what?

Next, the students would **take action** (the interventions can be nursing interventions or what they would expect the primary care practitioner to provide). They would explain what interventions they were doing and why they were doing them.

They should also prioritize their interventions (consider life threatening to non-life threatening).

Use debriefing as one teaching method in **evaluating outcomes**. Research (NLN, 2015) shows debriefing is a critical conversation for growing critical thinking and making better judgments. This is not just for clinical anymore! Questions that may be asked are: What would you do differently? Did that treatment work? If we do "x," what do you anticipate as normal outcomes/adverse outcomes? What would you do instead? How would the outcome be different?

Idea #2

Ask students to enter the pre-simulation phase within SimChart or Elsevier's Simulation Learning System (SLS). When in the pre-simulation phase, students will read through the History and Physical, Progress Notes, and any other information that has been documented.

This can be done as a pre-class or pre-simulation assignment. In the classroom, students can be put in groups to discuss the cues, develop and prioritize hypotheses, and determine a plan of care with expected outcomes. As a pre-simulation activity, students can create a concept map during the pre-briefing period based on the cues and hypotheses developed during this activity.

SimChart simulations or SLS can also be used for classroom discussion during lecture. Faculty can open the simulation and go to the pre-simulation information to review each component with the class. Then, the faculty will facilitate a discussion of the identified cues, hypotheses, solutions, implementation of solutions, and expected outcomes. The simulation scenario can be played out in the classroom with students documenting findings inside the EHR.

Continued...

Using Simulation to Add Clinical Judgment Theory to Your Curriculum, cont.

Idea #3

Open a lab report that has some trended labs. Do not tell students the patient's diagnosis. Have students tell a story about the patient based on the lab values. Ask them what this patient would look like and what cues might let them know they had abnormalities in the labs.

Idea #4

Open the medication orders for a patient within a simulation scenario. Do not tell students the patient's diagnosis. Have students tell a story about the patient based on the medications the patient is taking. Then, have them talk about the cues they would need to look for when the patient is taking the prescribed medications.

In conclusion, educators should begin preparing now for the Next Generation NCLEX by incorporating clinical judgment into their nursing curricula. In addition, all nursing faculty should stay up to date on the latest news from NCSBN related to the Next Generation NCLEX project. It is suggested to join their mailing list, which you can find at the bottom of the NCSBN's Next Generation NCLEX Project page, located here: https://www.ncsbn.org/ngn-talks.htm

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